

IN THE CLAIMS

This listing of claims replaces all prior listings:

1. (currently amended) A display device, comprising:

a light-emitting layer between a first electrode and a second electrode; and

a resonator structure resonating light generated in the light-emitting layer between a first end portion and a second end portion,

wherein an optical distance L_1 between the first end portion and a maximum light-emitting position of the light-emitting layer satisfies Mathematical Formula 1, and

~~an optical distance L_2 between the second end portion and the maximum light-emitting position of the light-emitting layer satisfies Mathematical Formula 2.~~

[Mathematical Formula 1]

$L_1 = tL_1 + a_1$, (Mathematical Formula 1)

where $(2tL_1)/\lambda = -\Phi_1/(2\pi) + m_1$, and

(where tL_1 represents a theoretical optical distance between the first end portion and the maximum light-emitting position, a_1 represents a correction amount based upon a light-emitting distribution in the light-emitting layer, λ represents a peak wavelength of the spectrum of light desired to be extracted, Φ_1 represents a phase shift of reflected light generated in the first end portion, and m_1 is 0 or an integer,) and

wherein an optical distance L_2 between the second end portion and the maximum light-emitting position of the light-emitting layer satisfies Mathematical Formula 2,

[Mathematical Formula 2]

$L_2 = tL_2 + a_2$, (Mathematical Formula 2)

where $(2tL_2)/\lambda = -\Phi_2/(2\pi) + m_2$, and

(where tL_2 represents a theoretical optical distance between the second end portion and the maximum light-emitting position, a_2 represents a correction amount based upon a light-emitting distribution in the light-emitting layer, λ represents a peak wavelength of the spectrum of light desired to be extracted, Φ_2 represents a phase shift of reflected light generated in the second end portion, and m_2 is 0 or an integer.)

2. (currently amended) A display device according to claim 1, wherein

the correction amount a_1 satisfies Mathematical Formula 3, ~~and the correction amount a_2 satisfies Mathematical Formula 4.~~

[Mathematical Formula 3]

$a_1 = b(\log_e(s))$, (Mathematical Formula 3)

{where b is a value within a range of $2n \leq b \leq 6n$ in the case where the light-emitting distribution in the light-emitting layer extends from the maximum light-emitting position to the first electrode, or a value within a range of $-6n \leq b \leq -2n$ in the case where the light emitting distribution extends from the maximum light-emitting position to the second electrode, s represents a physical value ($1/e$ decay distance) relating to the light-emitting distribution in the light-emitting layer, n is an average refractive index between the first end portion and the second end portion in the peak wavelength λ of the spectrum of light desired to be extracted-}, and

wherein the correction amount a_2 satisfies Mathematical Formula 4,

[Mathematical Formula 4]

$$a_2 = -a_1 \text{ (Mathematical Formula 4).}$$

3. (original) A display device according to claim 1, further comprising:

an organic layer including the light emitting layer between the first electrode and the second electrode.

4. (currently amended) A display unit, comprising:

a display device comprising a light-emitting layer between a first electrode and a second electrode, and a resonator structure resonating light generated in the light-emitting layer between a first end portion and a second end portion,

wherein an optical distance L_1 between the first end portion and a maximum light-emitting position of the light-emitting layer satisfies Mathematical Formula 1 5, and

~~an optical distance L_2 between the second end portion and the maximum light-emitting position of the light-emitting layer satisfies Mathematical Formula 6.~~

~~[Mathematical Formula 5]~~

$$L_1 = tL_1 + a_1, \text{ (Mathematical Formula 1)}$$

where $(2tL_1)/\lambda = -\Phi_1/(2\pi) + m_1$, and

{where tL_1 represents a theoretical optical distance between the first end portion and the maximum light-emitting position, a_1 represents a correction amount based upon a light-emitting distribution in the light-emitting layer, λ represents a peak wavelength of the spectrum of light desired to be extracted, Φ_1 represents a phase shift of reflected light generated in the first end portion, and m_1 is 0 or an integer-}, and

wherein an optical distance L_2 between the second end portion and the maximum light-emitting position of the light-emitting layer satisfies Mathematical Formula 2,

~~[Mathematical Formula 6]~~

$L_2 = tL_2 + a_2$, (Mathematical Formula 2)

where $(2tL_2)/\lambda = -\Phi_2/(2\pi) + m_2$, and

{where tL_2 represents a theoretical optical distance between the second end portion and the maximum light-emitting position, a_2 represents a correction amount based upon a light-emitting distribution in the light-emitting layer, λ represents a peak wavelength of the spectrum of light desired to be extracted, Φ_2 represents a phase shift of reflected light generated in the second end portion, and m_2 is 0 or an integer.}

5. (currently amended) A display unit according to claim 4, wherein the correction amount a_1 satisfies Mathematical Formula 3 7, ~~and the correction amount a_2 satisfies Mathematical Formula 8.~~

~~[Mathematical Formula 7]~~

$a_1 = b(\log_e(s))$, (Mathematical Formula 3)

{where b is a value within a range of $2n \leq b \leq 6n$ in the case where the light-emitting distribution in the light-emitting layer extends from the maximum light-emitting position to the first electrode, or a value within a range of $-6n \leq b \leq -2n$ in the case where the light emitting distribution extends from the maximum light-emitting position to the second electrode, s represents a physical value ($1/e$ decay distance) relating to the light-emitting distribution in the light-emitting layer, n is an average refractive index between the first end portion and the second end portion in the peak wavelength λ of the spectrum of light desired to be extracted-}, and

wherein the correction amount a_2 satisfies Mathematical Formula 4,

~~[Mathematical Formula 8]~~

$a_2 = -a_1$ (Mathematical Formula 4).

6. (original) A display unit according to claim 4, further comprising:
an organic layer including the light emitting layer between the first electrode and the second electrode.